

S&P Dow Jones Indices

A Division of **S&P Global**

INDEX INVESTMENT STRATEGY

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Index Dashboard: Dispersion, Volatility & Correlation

November 30, 2021

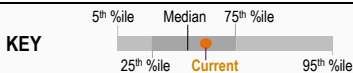
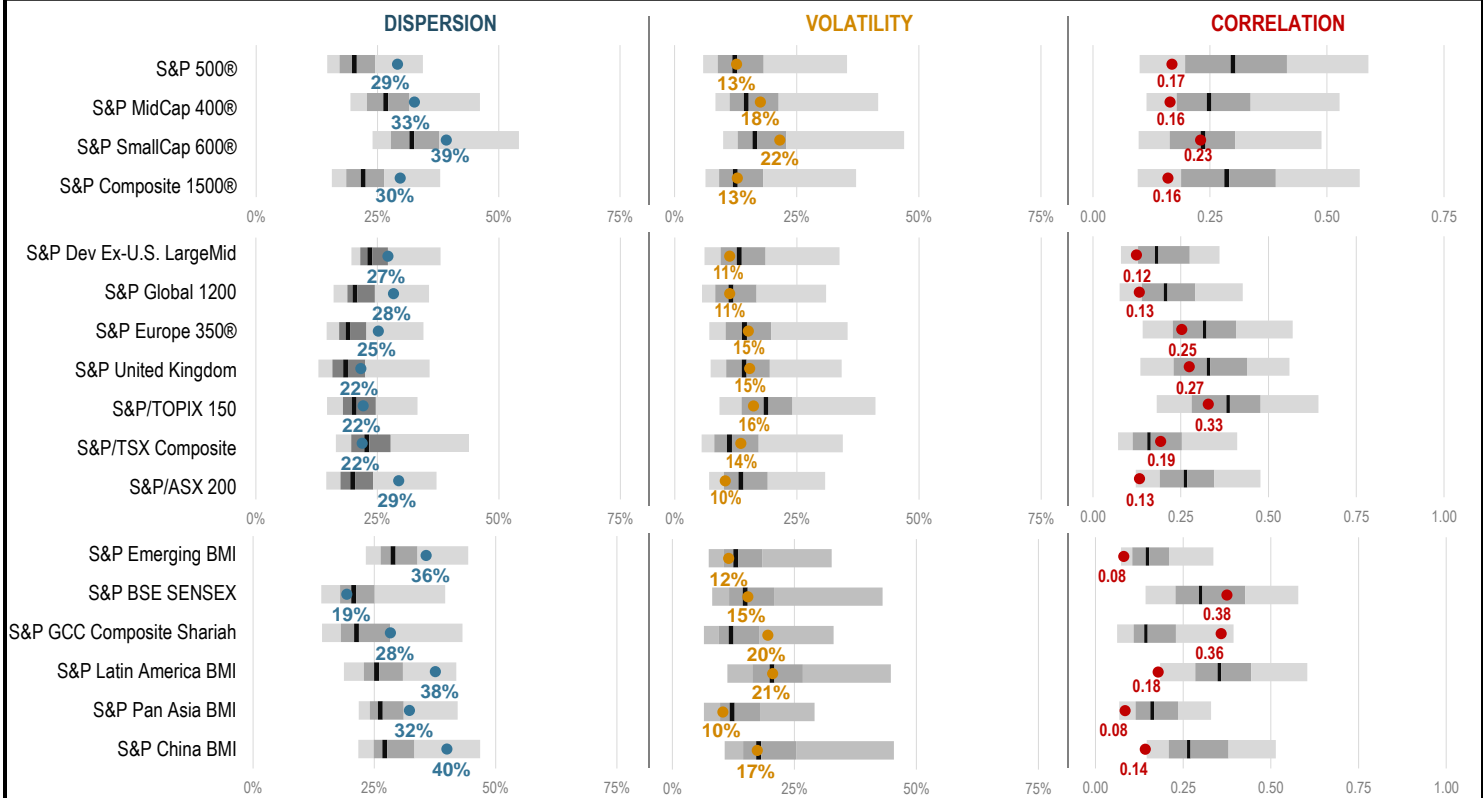
COMMENTARY

Dispersion continued at well above average levels in U.S. equities this November, running at 29% annualized in the S&P 500 and 39% in the S&P SmallCap 600. Volatility was lower than might otherwise have been expected given the late-month sell-off, as below-average correlations continue to produce strong diversification effects.

Global equities showed a similar picture. Dispersion was mostly in the top quartile of historical observations across a range of global benchmarks, but volatility was close to average thanks to continued low correlations.

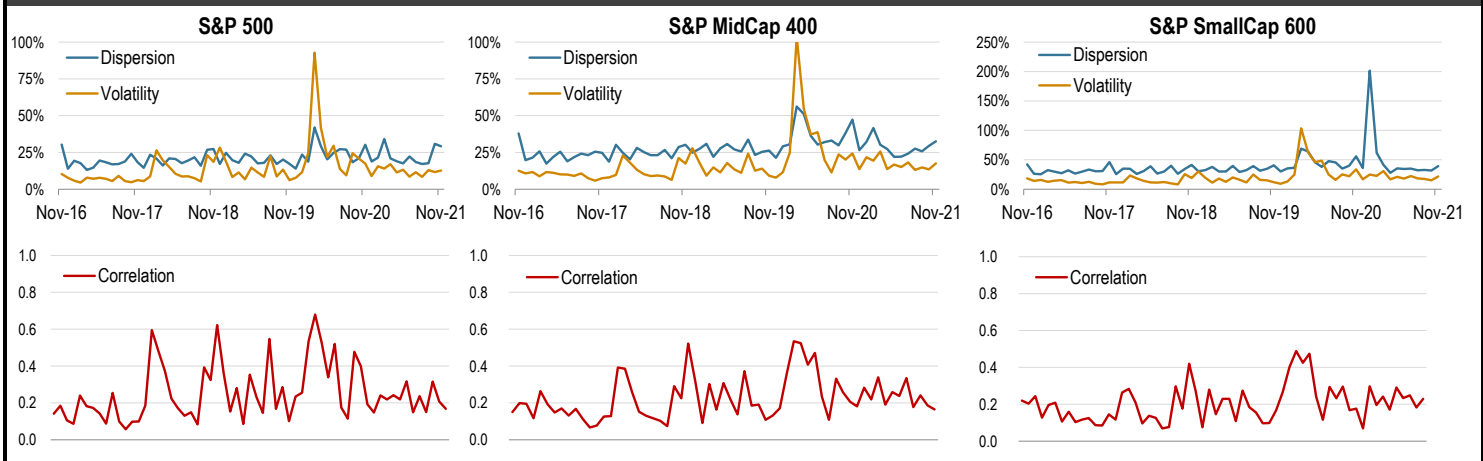
The “noisy” nature of China’s markets continued to make it a global outlier, with the S&P China’s monthly dispersion of 40% again placing it highest among our reported indices.

GLOBAL DASHBOARD



Dispersion, correlation and volatility shown in relation to the median and 5th, 25th, 75th and 95th percentile of monthly values (over the period Jan 2007 to date). Dispersion and volatility are annualized, correlation is the absolute level during the past month.

MAJOR BENCHMARKS - PAST FIVE YEARS



Source: S&P Dow Jones Indices as of Nov 30, 2021 * See "Notes" for explanations and definitions.

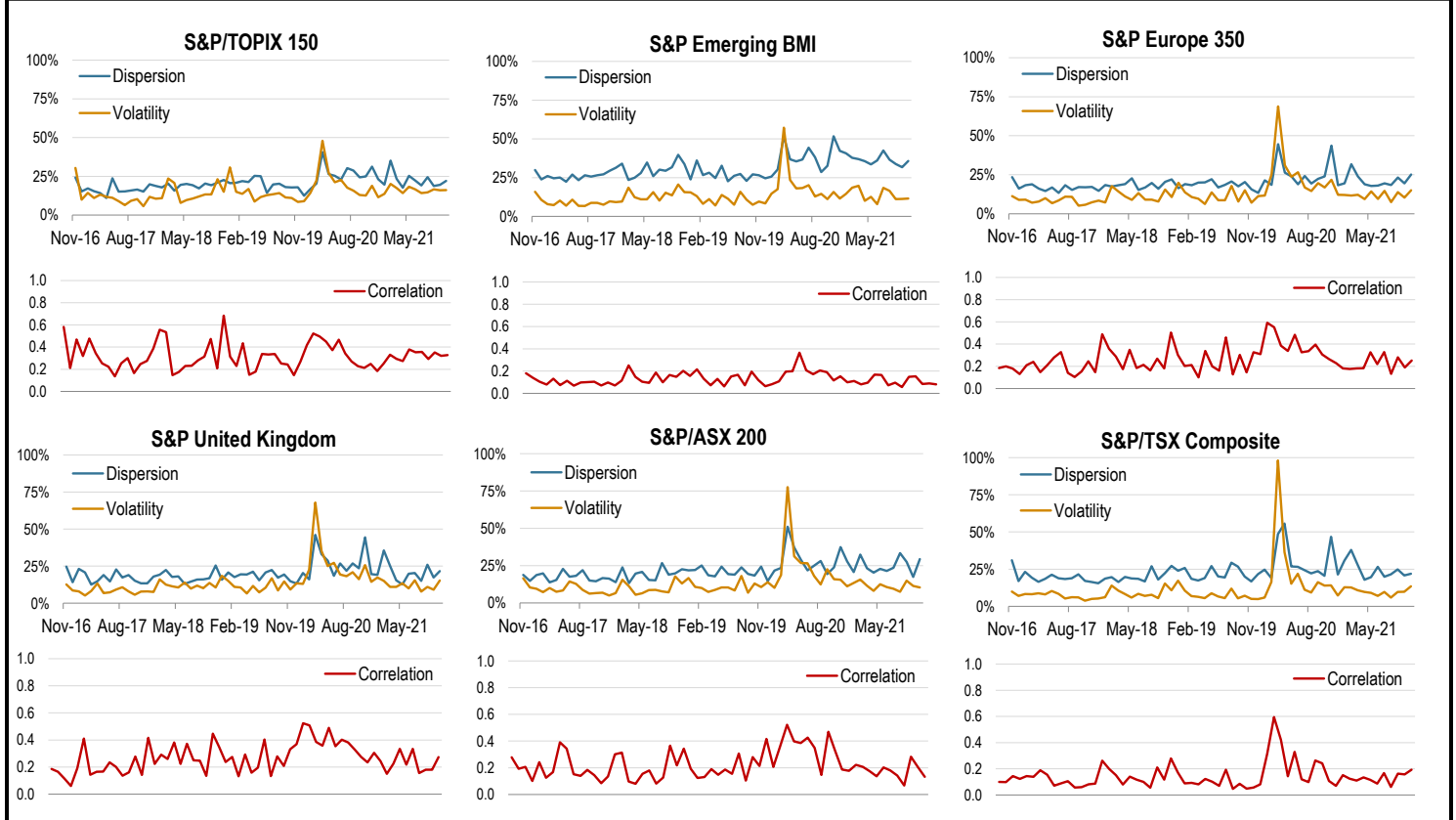
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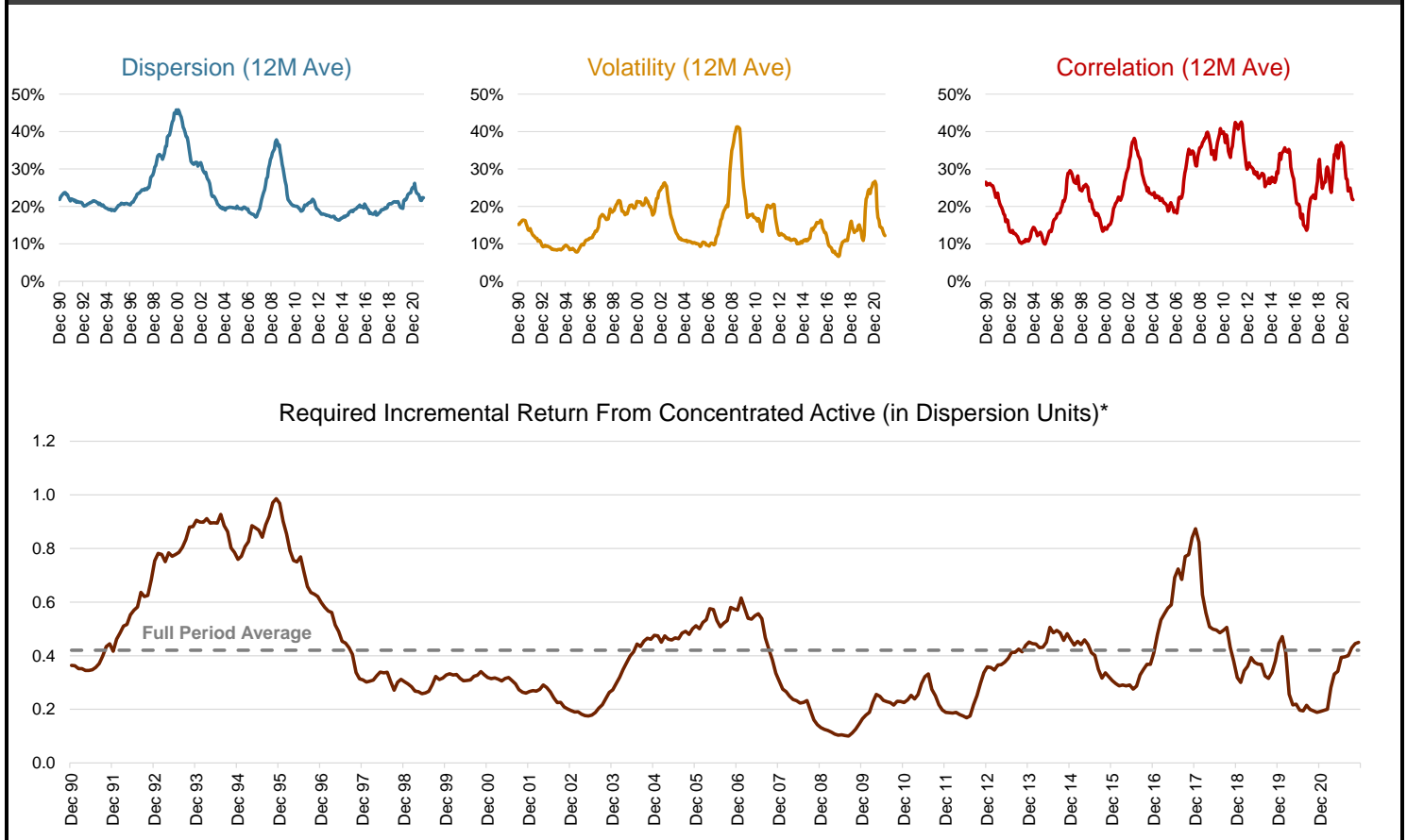
Index Dashboard: Dispersion, Volatility & Correlation

November 30, 2021

MAJOR BENCHMARKS - PAST FIVE YEARS (cont'd)



S&P 500 - 12M TRAILING AVERAGES & ACTIVE RETURN DIFFICULTY



Source: S&P Dow Jones Indices as of Nov 30, 2021 * See "Notes" for explanations and definitions.

NOTES

Definitions

Dispersion for each index is the annualized, index-weighted standard deviation of the index constituents' full-month total returns. See "[Dispersion: Measuring Market Opportunity](#)" for a formal definition of dispersion and more information on its uses.

Correlation for each index measures the correlation among the daily returns of the index constituents during the month, calculated via the ratio of index variance to the index-weighted average constituent variance. See "[At the Intersection of Diversification, Volatility and Correlation](#)" for a more detailed explanation of the calculation.

Volatility for each index is the annualized standard deviation of daily index price returns during the month. See "[The Landscape of Risk](#)" for details on the relationship of correlation, volatility and dispersion.

Required Incremental Return From Concentrated Active (in Dispersion Units) provides the excess return, in multiples of 12M trailing average dispersion, required from a concentrated position in a single index constituent with 12M trailing volatility equal to the index-weighted average, such that the ratio of return to volatility of the position matches that of an investment with volatility matching the index's trailing 12M volatility, and an annual return of 10%. For further details, see "[The Active Manager's Conundrum](#)".

Measurement Periods For Historical Ranges (p1)

The time period over which the median and percentiles of dispersion and correlation are measured begins with January, 2007 and ends with the current month except in the case of the S&P GCC Composite Shariah (which has a history to April, 2007).

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